Witnessing awareness and modes of cognitive awareness

A terminology proposal for the psychological assessment of witnessing and (meta)cognitive experiences.

Ovidiu Brazdau

Introducing a new terminological framework for the psychological assessment of witnessing awareness experiences, based on a rational perspective and the first-person reports of Eastern and Western practitioners.

I am, the ability that has no operational definition

The witnessing awareness experience is a type of subjective experience described in most religious and spiritual traditions as a non-dual experience, beyond the mind and the self, without any possibility to use more than two words to describe it: I am. The actual paradigm in religious thinking describes this experience only in terms of what is not: it is not the mind, attention, or emotions. Though we do not have a scientific consensus on the words that describe this experience, we use technical terminology pointing to it: mystical experience, spiritual enlightenment, awakening, spiritual revelation, transpersonal state.

The border between mysticism and psychopathology is a sensitive line for the psychiatry of the western world. A psychiatric report on mysticism in the US, published in 1976, states that mystical phenomena may be of interest because "they can demonstrate forms of behavior intermediate between normality and frank psychosis; a form of ego regression in the service of defense against internal or external stress; and a paradox of the return of repressed regression in unconventional expressions of love" [2]. A radical change happened in 1994 when a group of researchers introduced a new diagnostic category in The Diagnostic and Statistical Manual of Mental Disorders published by the American Psychiatric Association, fourth edition, which refers to Religious or Spiritual Problem. Since then, the expansion of consciousness science has clarified many of the dilemmas coming from spiritual experiences and eastern practices.

I am exploring here the witnessing awareness experience from the perspective of psychological assessment and the psychology of personality, considering witnessing awareness as a mode of functioning. I explore the witnessing awareness experience without using concepts such as spiritual, spirit, psychosis, enlightenment, transpersonal, and keep these words as descriptions of the experience, not as explanations, as they have too much emotional content that it may bias our understanding.

My perspective is based on first-person reports, and I assume that people's experiences are natural for them, but the interpretations may be delusional. Another issue is that exploring the witnessing awareness experiences through self-reports has a critical gap: how can a first-person

report refer to a formless non-experience, when an experience such as witnessing awareness is described?

I think this gap needs to be removed from our scientific paradigm. The idea is that there are no words for a witnessing awareness experience, to me it means that there are no words now. It is time to abandon the perspective that we cannot explain witnessing experience. Two thousand years ago, we did not have the full suite of scientific terminology to explain it. But we may have this terminology nowadays. In addition, we can invent new concepts if needed. We would not be forced to explain a natural phenomenon related to consciousness using a two-thousand-year-old terminology.

Witnessing awareness mode: a natural dynamics of the psyche

An essential characteristic of awareness is the ability to be reflective of itself. At an early age, the children get a new feature: self-awareness; their identity is formed, and they can differentiate between themselves and the environment. They are now able to use the first-person perspective.

The subsequent development of the psyche is the witnessing experience: the ability to look at our own body, thoughts, feelings, and awareness as a neutral witness, as if from outside, and then feel a witnessing awareness somehow. We experience an I, an Observer, watching ourselves doing things. This is the starting point of an experience people describe as an awakening. The brain starts to function differently. Then, some of us, I suspect a vast majority, develop the experience of conscious witnessing: we witness the I, the attention beam itself, and the I as an object of attention: awareness of awareness, in a perfect flow of conscious awareness, pointed toward itself. The pure conscious experience of I am.

This experience is covered in mystical terminology. What people report after this state is an interconnectedness between all there is, between the I and the other human beings, and all the other life forms and nature around us. These events are reported frequently using the concept of spiritual enlightenment.

After this first *I am* experience, one becomes gradually capable of re-living the experience, increasing its intensity and clarity, until it habituates and becomes permanent. However, is this witnessing awareness mode the end of human evolution? Is that all? Having a permanent witnessing awareness experienced as one, both inside and outside, is that the end of the journey?

I assume that the experience of witnessing awareness is not changing the patterns of the mind just like that. Becoming a more conscious human being is a choice, and witnessing awareness gives the individual the freedom to be conscious and perceive hidden parts of reality. After experiencing the witnessing mode, the long road of balancing the unconscious patterns begin. Though many reports describe that the ego dissolves, I would advance the idea that even while witnessing awareness is sustained, there is an automatic organization and integration of habitual patterns related to the mind. If the automatic patterns are balanced, the resulting actions will be balanced.

The witnessing awareness mode and the cognitive consciousness mode

My terminological proposal separates the two experiences: the Witnessing awareness experience (witnessing awareness mode), and the Self experiences (cognitive consciousness mode), related to cognitive processing.

Three concepts are most important in describing the witnessing awareness mode: attention, awareness, and consciousness:

- Awareness is "the background radar of consciousness, continually monitoring the inner and outer environment. One may be aware of stimuli without them being at the center of attention". [3]
- Attention is "a process of focusing conscious awareness, providing heightened sensitivity to a limited range of experience" [4]. Two types of attention are essential for witnessing experience, described in meditation texts: concentrative and receptive attention. Concentrative (focused) attention is a narrow and intense focus of attention on a single point. Receptive attention, related to mindfulness practices, is a non-reactive monitoring of the content of experience from moment to moment [5]. This diffused wide range and non-focused attention monitors the inner and outer environments for relevance. When it notices something relevant, it handshakes with our focused attention, which then isolates and narrows down the range of attention and perception to what is noticed, mostly a particular object. [6]
- Consciousness experience encompasses awareness, attention, and the cognitive representation of the object or objects perceived. The process of concentrating/focusing and receptively diffusing attention provides heightened sensitivity to both a limited and large range of experience.

But who is watching the show? The following distinction is reported: the experience of the Seer can have two modes. One mode is the I, experienced in the witnessing awareness mode, and the other is the Self (ego), experienced in the cognitive consciousness mode. When the Seer is in the Self (ego) mode, there is also a kind of observing experience available, as a third party observer. When the witnessing awareness mode appears, the fixed ego 'disappears,' and the Seer is seen as an I devoided of its cognitive attributes. I presume there is still a kind of homeostatic organization of the mind patterns during this mode, but the individual just lets the mind flow naturally, based on its patterns (not necessarily balanced).

Attention is a vital element in the witnessing awareness mode. In Buddhism, mindfulness practice is based on receptive attention. Carlo Monsanto [7] describes the differences between concentrative/receptive attention:

"The witness doesn't put anything into and doesn't take anything out of the experience. It is through attention that this witness or conscious awareness relates to experience. And when the witness channels through the brain, attention is either concentrative (left-brained) or receptive or stimulus-driven (right-brained).

So, attention either perceives 1) just one object, while filtering out everything else or 2) it is receptive to perceive the interconnected reality - the collective. And the witness is the metaposition that organizes these streams of activity through the brain.

Hence we can experience a state wherein we identify with separate objects (concentrative / duality), or experience an interconnected reality (receptive / duality) or are the witness (meta / non duality) that integrates all of the previous states. We are capable as a witness of being fully present in the brain's activity, that works on the basis of concentrative and receptive attention, during any human activity. At this time we are completely free and live in the world but are not of the world. This is accessible to any willing person". [8]

In the following table, I organized some descriptors of the subjective experience in the Witnessing Awareness mode vs. Cognitive Consciousness mode.

Witnessing Awareness Mode

Cognitive Consciousness mode

A zero reference for mental activity

Witnessing

Witnessing Self - "I"

I am

Meta consciousness Stable Witnessing awareness

I, witness patterns, choose or accept mental patterns

Witness mind and personality Witness feelings and sensations

De-automation, paying attention to present moments One mode of pure awareness, access to any part of the mind

(no subconscious)

Witnessing experience, Aware of awareness itself

Pre-reflective state

Jamais vu

Knowing by contemplation (still need the mind to interpret)

Allows increased perceptual processing and

unconscious processing (faster)

Supported by receptive attention (attend diffusely to a whole

field)
Just being

Direct experience through awareness, independent of ASC

(e.g., natural connection with the environment)
Just watching. Voluntary control over thoughts and ego.
No repressed ideas in the unconscious, letting go of any

emotions and thoughts, good or bad

No desire to control, relaxed decision making

Accepting all emotions

Feeling on interconnectedness with all life forms

Universal love

Process of transformation through increased acceptance of life (higher level of abstraction)

The state of the s

Felt as real freedom (I am as free as I can be)

Know all the states Pure awareness

Here-Now Experience Observing surroundings, Perceptual visual data

Experiential therapies and techniques

A spectrum of mental activity Observing, identifying (Observing) Self – ego I am me

Cognitive consciousness Dynamic mental awareness

Self, Experience of patterns of thinking and feeling

Self-Actualization, Individuation

Observer - First-Person

Cognition, thinking. Personality traits

Aware of external/internal stimuli, Feeling, Sensing

Automatic behavior and cognitive patterns

Consciousness, conscious and unconscious content and

processing Déjà vu

Knowing by thinking, feeling, sensing

Cognitive processing

Conscious and controlled processing Supported by concentrative attention Imagining a need for enlightenment Altered states of consciousness (ASC)

(e.g., expanded consciousness)

Mystical experiences. People report a disconnect from

thought processes and ego

Unconscious formed of repressed negative ideas, emotions

Control of thinking and emotions Selecting good emotions Feeling of separation, ego Love for close friends

Process of transformation through higher-order thoughts

the (higher level of abstraction)
The idea of freedom

Remember the states, state-dependent memory

Flow Consciousness Wandering in thinking

Switching modes: surroundings/thinking Self-image rational psychotherapies

In the witnessing experience, "the subject is witnessing as it presents from a psycho-physical (hence spatiotemporal) perspective" [9]. From a philosophical point of view, witnessing "is

modality-neutral... it is not tied to a particular mode of cognition, and it has its own phenomenal character... there is something it is like simply to be aware". [10]

The witnessing awareness mode is described by the first person reports as a constantly fresh look into the present moment, as a new *zeroth-person* perspective, when there is only a present-centered experience. This type of first-person description is embraced by some consciousness scientists, who support the idea that there is no stream of consciousness after all, because there is no need to store any data.

Susan Blackmore supports the idea that there is no need for internal representations at all because the world is the external memory. But is this a valid explanation for the mind and thinking experiences?

"Conscious visual experiences are generated not by building representations but by mastering sensorimotor contingencies. What remains between saccades is not a picture of the world, but the information needed for further exploration. A study by Karn and Hayhoe (2000) confirms that spatial information required to control eye movements is retained across saccades. This kind of theory is dramatically different from existing theories of perception. It entails no representation of the world at all". [11]

A particular dynamic of these two modes of functioning is described by the term *pure conscious event* (PCE). Supported by Robert Forman ^[12], PCEs are critically approached by several authors who have questioned both the very existence of PCEs and their universality ^[13]. I support the idea that the framework of mystical experiences is fundamentally the same worldwide, and we can find its common traits using psychological assessment methodology and looking at archetypal levels, using dreamwork psychology methodology.

Activating the witnessing awareness mode: the journey that is not necessary

The milestones of the transformational journey to the deeper parts of the Self are presented in a straightforward but technical way in *Yoga Sutras* of Patanjali, when he describes the path to Samadhi, and then through different stages of Samadhi, until the final realization is obtained and habituated.

But, there is no need to sit in meditation to achieve the witnessing awareness mode. It is precisely the opposite. The mind is imagining that we need a journey, but in fact, we don't. Witnessing is a conscious choice. Starting the witnessing awareness mode may be a serendipity event or a guided result, with simple instructions: paying attention to the present moment and letting go of your mind. Many of the simple techniques are provided by the teachers of Advaita and other non-dual movements.

Most of us have at least once in our childhood the experience generated by the witnessing awareness mode, but we forgot the experience. A glimpse of the witnessing awareness mode is sometimes activated when we are in love, while the Ego barriers are temporary down. In a technical reductionism, I would describe the emergence of the witnessing awareness mode in the following steps:

- 1) Natural occurrence: The witnessing experience appears naturally during life, then it is forgotten.
- 2) Openness to new patterns: Usually, due to some significant moment, the mind becomes free gradually, the ego opens, the mind is free to think new ideas, new emotions manifest, usually with a kind of a third-person perspective, the spectator. This stage is the first experience of witnessing awareness, the first experience of I am, the witnessing experience with the mind one-pointed to the I, with a duration of some minutes-hours-days. And this is not necessarily happening while meditating.
- 3) Archetypal freedom of mind, witnessing awareness mode is active most of the time: The mind gradually begins to let go, reaching the archetypal levels. The Jungian-Senoi dreamwork psychology refers to the following archetypes of the collective mind: masculine, feminine, adversity, heroic, journey, death/rebirth, Self, wise old man, mother. There is a constant switch between witnessing awareness and cognitive modes, between witnessing experience and self-experience. Through witnessing, the individual can reorganize the emotional and cognitive patterns; during the witnessing mode, the person reports they can consciously avoid old habits and start new ones. In this stage, the ego loses its power, and the defense mechanisms may appear to protect it.
- 4) Sustained witnessing experience, balanced mind patterns: "Before Enlightenment chop wood carry water, after Enlightenment, chop wood carry water". "When hungry eat, when tired sleep" (Zen proverbs). The patterns of the mind-body-emotions remain active, but balanced. This is when the witnessing awareness mode is always on, and the mind is free of all the unconscious patterns that caused unbalancing. After the first occurrence of the witnessing awareness mode, witnessing becomes more present, for some minutes a month or some days a year. Sustaining witnessing takes time, like any new capacity [14]. And it is not a certain fact that having the witnessing experience once will lead to its habituation.

Ramana Maharishi describes the process of cleaning the patterns of the mind as follows:

"Q: Should all vasanas, (memory imprints, patterns) be completely overcome before Self Realization takes place, or some may remain for Self Realization to destroy? Ramana: Vasanas which do not obstruct Self Realization remain. In Yoga Vasishta, two classes of vasanas are distinguished: those of enjoyment, those of bondage. The enjoyment vasanas remain ever after Mukti (Freedom) is attained, but the bondage vasanas are destroyed by it. Attachment is the cause of binding vasanas, but enjoyment without attachment does not bind and continue even in Sahaja." [15]

During the witnessing awareness mode, the individuals report a feeling of being in the present moment; they experience a present-centered attention and life as a flow. Being here-now seems to be a vibrant experience. The flow of the present moment is continuous, creating a sense of interconnectedness with all life forms. Some people may experience strong positive emotions during these states. After the habituation of the witnessing experience, these strong emotions do appear, but occasionally.

The Buddhist monk Smritiratna speaks about bliss and rapture, in an interview by Jeff Warren:

"This happens when an object becomes an aesthetic object for you, when it feels like the most beautiful thing-you're delighted, fascinated. You have a strong emotional interest, like being in love. You pass a threshold where experience becomes so beautiful that there is nothing else you would rather be doing. Everything else fades away, even pain if you're sitting uncomfortably. A lot of meditators get this. The object of your devotion can be anything—a vase, a piece of music. Once I was climbing up a hill and I entered an alpine garden of mosses and rock flowers and I got down on my knees and just gazed in wonderment." He stopped, a bit embarrassed. "This is a kind of bliss."

"So how often does that happen for you?"

"It's hard to say because it's all a matter of degree. Maybe once a week or so. It began many years ago. I would be meditating and once in a while I would feel joy and delight, at being so totally engaged in the one thing. It was a kind of concentration where all energies-emotional, physical, intellectual—are centered upon one thing. This is what is described in the jhanas. Bliss and rapture followed by one-pointedness and sustained attention".

An unusual testimony comes from Dalai Lama, talking about the essence of Buddhism in an interview published in Rolling Stone Magazine

"When people think it's all about doing tantric visualizations and rituals. When I talk about the Buddhist dharma, I'm not talking about just chanting and rituals. If it's thought to be a philosophy, it's not that, either. The dharma, it's just the mind. I'm afraid that among the Tibetans, the Chinese and also some Westerners—the new Buddhists—in many cases they consider the practice of Buddhism is simply to recite something and perform some ritual, putting false expectations on the esoteric magic of tantra: 'Oh, if I do this, I may get something amazing!' So they neglect the basic instruments that actually transform our mind.

These instruments are the altruistic spirit of enlightenment [bodhicitta], the transcendent attitude, renunciation, the realization of impermanence, the wisdom of selflessness. People who think they have a magic gimmick neglect these things. So their inner world, their inner reality, remains very raw. Sadly, use of ritual can feed that neglect. Knowledge of philosophy can also feed that. It's a great tragedy." [16]

Activating the witnessing awareness mode: spiritual path, side-effects, and rational thinking

Some mystical experiences and altered states of consciousness are related to cognitive consciousness mode, not witnessing. Rational thinking is necessary during the habituation process; otherwise, the patterns of the mind are hard to change. An additional characteristic is that sustaining witnessing awareness produces an increased sense of interconnectedness. The first person reports always include descriptions such as we are one, we are all connected, I am God, we are God. Ego issues during the journey are a part of the problems that could appear. During these stages, the person lives their life at cosmic proportions, in a very profound way.

This is how Smritiratna describes his experience:

"Q: "Do you experience the jhanas like they say in the Visuddhimagga? Does that happen?"... Smritiratna: "Sometimes I'm very absorbed in the experience, other times I'm trapped in one of the hindrances, in my own distracting thoughts."

"I've never had any out-of-body experiences, if that's what you're asking. Or seen the strange colors and landscapes that some people report. Several times in my early years I felt my body expanding outward, to fill the whole room. At the time I thought, 'Wow, now we're really getting somewhere.' But this no longer happens very often, and I no longer think it's important. In Buddhism we call these effects 'samapatti'—unusual or extraordinary experiences. That's simply telling you that meditation is having an effect. It has no extra meaning with regard to your meditation progress." [17]

After activating the witnessing awareness mode, the unconscious mind reveals itself. The last remains of the unconscious are the archetypes, that need to be balanced. Unless the brain is damaged, there is no such thing as a perfect human being with no mind. Some humans have a permanent witnessing awareness experience, but the patterns of the mind are still there in their archetypal forms, and need balancing. So, don't call off the search if you have experienced the witnessing awareness experience, as some neo-Advaita masters advise [18]. There is still a lot to work with the patterns of the mind.

There is an increased risk for individuals that activate the witnessing experience, and at that moment they don't have a balanced mind, to think for some time that they have been selected for special missions in their lives. While activating the witnessing awareness mode, the mind becomes gradually free, and during this process, the information repressed within the unconscious is being accepted and integrated. This reorganization process is sometimes described as a *spiritual emergency* or *psychospiritual crisis*.

In 1980, Christina and Stanislav Grof founded the Spiritual Emergency Network. This organization connects individuals undergoing psychospiritual crises with professionals who are able and willing to provide assistance based on the new understanding of these states.

The spiritual crises related to awakening can now be correctly identified by psychiatrists, thanks to the new diagnostic category in DSM-IV, "The Religious or Spiritual Problem". For the first time, there is an acknowledgment of distressing religious and spiritual experiences as non-pathological problems. ^[19]

Depending on the psychology of the individuals, the information arising from the unconsciousness is blocking the rational function for a while, thus leading to some unusual interpretations of reality. The main types of spiritual emergence are shamanic crisis, awakening of kundalini, episodes of unitive consciousness, psychological renewal through return to the center, crisis of psychic opening, past-life experiences, communication with spirit guides and "channeling", near-death experiences, close encounters with UFOs and alien abduction experiences, possession states, alcoholism and drug addiction. [20]

James Kent, a researcher of mystical experiences induced by DMT ^[21] explains how the patterns of the visual imagery during DMT-induced states are based on fractal patterns in the retina. In the introduction to his book *Psychedelic Information Theory. Shamanism in the Age of Reason*, he writes: "the book is a formal deconstruction of psychedelic hallucination,"

[&]quot;You mean that still happens even after twenty years?"

[&]quot;Of course!"

[&]quot;Well, I mean, what about the weird visions and all that? Those seem like some pretty crazy special effects."

expanded consciousness, and shamanism, and as such, it attempts to move topics which have traditionally been classified as metaphysics into fields of physics and mathematics". [22]

He presents arguments that the aliens or angels people see during DMT states are nothing more than their own imagery, based on physiology. In a comment on *Sex, Drugs, Einstein, & Elves* [23] he writes:

"I think in general people like to romanticize the DMT state and make it more than it is because they desperately want there to be a hidden hyperspatial world filled with mischievous sprites and god-like entities. However, when one closely studies the experience over and over again over time you come to see that a lot of the romanticized notions are not what is actually happening in the state, and people tend to "editorialize" the content of the experience in hindsight in order to make it into something more than what it actually is." [24]

Although knowledge is available, the journey that leads to activation witnessing experience is a hard one nowadays. The abundance of pseudoscience and spiritual entertainment proposals make the journey difficult. Simple things that can be said in one minute are covered in great books and great talks that require weeks or months to understand. There is a cognitive temptation that seems to attract people to supernatural interpretations of reality.

Susan Blackmore, one of the scientists from the consciousness research, describes her scientific efforts to verify if humans can access a presumable psychic field:

"I believed that all minds were connected through a psychic field and that memory was a special case of telepathy. So I set to work on a long series of experiments comparing ESP and memory. The results were a shock. Whether I looked for telepathy or precognition or clairvoyance, I got only chance results. I trained fellow students in imagery; chance results. I tested twins in pairs; chance results. I worked in play groups with very young children; chance results. I trained as a Tarot reader; chance results. Occasionally I got a significant result. Oh the excitement! Then as a scientist must I repeated the experiment, checked for errors, redid the statistics, and varied the conditions, and every time either I found the error or got chance results again". [25]

I would like to thank Gina Gheoca, Carlo Monsanto, Sperry Andrews, and Sona Ahuja for their support in matching the pieces of this consciousness puzzle.

References:

- [1] http://www.amazon.com/Brain-Mind-Cosmos-Existence-Scientists-ebook/dp/B00KAKEYIY
- [2] Committee on Psychiatry and Religion of the Group for the Advancement of Psychiatry. (1976). Mysticism: Spiritual Quest or Psychic Disorder? Vol. 9, Publication 97. New York: The Group for the Advancement of Psychiatry, p. 731
- [3] Brown K. B., Ryan R., M. (2003). The Benefits of Being Present: Mindfulness and its Role in Psychological Well-Being. *Journal of Personality and Social Psychology*, Vol. 84, No. 4, 822–848
- [4] idem
- [5] Koutstaal, W. (2012). The Agile Mind. New York: Oxford University Press
- [6] Thanks to Carlo Monsanto for this terminological clarification
- [7] https://www.iolee.life/
- [8] Personal communication, April 25, 2013
- [9] Albahari, M. (2009). Witness consciousness: its definition, appearance, and reality. *Journal of Consciousness Studies* 16(1): 62–84. [10] Aaron Henry & Evan Thompson (2011). Witnessing from Here: Self-Awareness from a Bodily versus Embodied Perspective. In Shaun Gallagher (Eds.), *The Oxford Handbook of the Self*. Oxford and New York: Oxford University Press
- [11] Blackmore, S. There is no stream of consciousness. Retrieved May, 26, from http://www.susanblackmore.co.uk/Articles/jcs02.htm
- [12] Forman, R.K.C. (Ed.), (1990). The Problem of Pure Consciousness: Mysticism and Philosophy. New York: Oxford University Press.
- [13] Rocco J. Gennaro (2008). Are There Pure Conscious Events? In Chandana Chakrabarti & Gordon Haist (eds.), *Revisiting Mysticism* (pp.100-120). Cambridge Scholars Press
- [14] Deikman, Arthur J. "De-automatization and the Mystic Experience." Psychiatry: Journal for the Study of Interpersonal Processes (1966).

- [15] Savikalpa and Nirvikalpa Samadhi (January 27, 2009). Retrieved May 26, 2013, from http://www.arunachalaramana.org/forum/index.php?topic=2430.0
- [16] Thurman, R. (2001, May). The Rolling Stone Interview: The Dalai Lama, Rolling Stone Magazine
- [17] Warren, J. (2007). *The head trip: Adventures on the wheel of consciousness*. Oxford: Oneworld Publications, p. 305. [18] Conway, T (March 1, 2008). *Neo-Advaita or Pseudo-Advaita and Real Advaita-Nonduality*. Retrieved May 20. 2013, from http://www.enlightened-spirituality.org/neo-advaita.html
- [19] Lukoff, D., Lu, F., & Turner, R. (1998). From spiritual emergency to spiritual problem: The transpersonal roots of the new DSM-IV Category. Journal of Humanistic Psychology, 38(2), 21-50.
- [20] Grof, S. (2009). Spiritual Emergencies: Understanding and Treatment of Psychospiritual Crises. Retrieved May 20, 2013, from http://www.realitysandwich.com/spiritual emergencies
- [21] DMT is the primary psychoactive compound in ayahuasca, used by indigenous Amazonian Amerindian cultures for divinatory and healing purposes
- [22] Kent, J. (2010). Psychedelic Information Theory. Shamanism in the Age of Reason. Seattle: PIT Press
- [23] Clifford A. P. (2005). Sex, Drugs, Einstein, & Elves. Petaluma: Smart Publications
- [24] Kent, J. (2004). DMT Elves [Online Forum Comment]. Retrieved May 10, 2013, from http://sprott.physics.wisc.edu/pickover/pc/dmt.html
- [25] Blackmore, S. (2010) Why I had to change my mind. In Gross R. Psychology: The Science of Mind and Behaviour. London: Hodder Education